

FORM PTO-1449
(Rev. 2-32)

U.S. Department of Commerce
Patent and Trademark Office



INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

Atty. Docket No.

97,022-F3

Serial No.

09/718,770

Applicant:

R. Terry Dunlay et al.

Filing Date:

November 22, 2000

Group:

1641

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	4,942,526	July 17, 1990	Okajima et al.			
	2.	5,021,220	June 4, 1991	Mertens			
	3.	5,181,163	Jan 19, 1993	Nakajima et al.			
	4.	5,218,695	June 8, 1993	Noveck et al.,			

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	51.	WO 97/45730	Dec 4, 1997					
	52.	WO 98/15825	April 16, 1998					
	53.	WO 98/38490	Sept 3, 1998					
	54.	WO 99/05323	Feb 4, 1999					

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	63.	Agile Business Rule Processing", The Haley Enterprise, Inc., 1999, pages 1-9
	64.	"Bioinformatics, Pharmaceutical Informatics And Drug Discovery", www.basefour.com/what_is.html, pages 1-3.
	65.	"Bionumerik Pharmaceuticals", Red Herring Magazine, www.rhventure.com/mag/issue67/news-feature-du99-bionum.html, pages 1-2.
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	6.	5,263,126	Nov 16, 1993	Chang			
	7.	5,276,860	Jan 4, 1994	Fortier et al.			
	8.	5,276,867	Jan 4, 1994	Kenley et al.			

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	55.	WO 00/03246	Jan 20, 2000					
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	66.	"BioNumerik Reports Preclinical Antitumor Data On Two Novel Supercomputer Engineered Anticancer Agents At 89th Annual AACR Conference", www.prostatecancer.com/otherinfo/story2-aacs.html-ssi , pages 1-3.
	67.	"Chemistry And Biological Sciences", Silicon Graphics, Inc. (SGI), 2000, www.sgi.com/chembio/cust_success/bionumerik.html , pages 1-2.
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	10.	5,307,287	April 26, 1994	Cramer, III et al.			
	11.	5,340,719	Aug 23, 1994	Hajek et al.			
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	60.	WO 00/70342	Nov 23, 2000					
	61.	WO 01/11340	Feb 15, 2001					
	62.	WO 01/35072	May 17, 2001					

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	68.	"Cray And BioNumerik Pharmaceuticals: Engineering More Rapid Cures For Today's Diseases", www.cray.com/features/bionumerik.html , pages 1-3.
	69.	"CS 267 Assignment One - Drug Design", garnet.berkeley.edu/~abeand/cs267/assignment1.html , pages 1-2.
	70.	"DIVA Desktop Decision Support For Life Sciences Research For Windows 95, Windows 98, Windows NT", Oxford Molecular, 1999, pages 1-4.
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	14.	5,418,943	May 23, 1995	Borgida et al.			
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	71.	"Knowledge Management And Knowledge Automation Systems", Gallagher Financial System, Inc., pages 1-6.
	72.	"Project Explorer: Enabling Knowledge-Led R& D Projects", Synomics, www.synomocs.com/m/products/projectexplorer.htm , pages 1-3.
	73.	Allee, C. (1996), "Data Management for Automated Drug Discovery Laboratories", Laboratory Robotics and Automation, Wiley, USA, Vol:8(5) pp. 307-310.
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	18.	5,537,585	July 16, 1996	Blickenstaffe et al.			
	19.	5,554,505	Sept 10, 1996	Hajek et al.			
	20.	5,615,112	Mar 25, 1997	Liu Sheng et al.			

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	74.	Andrade et al., "Bioinformatics: From Genome Data To Biological Knowledge", Current Opinion In Biotechnology 1997, 8, pages 675-683.
	75.	Arbour Group, Software Specialists To The Pharmaceutical And Medical Device Industries, www.arbournroup.com, (various other articles from this site).
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	21.	5,675,819	Oct 7, 1997	Schuetze			
	22.	5,742,811	April 21, 1998	Agrawal et al.			
	23.	5,751,605	May 12, 1988	Hurst et al.			
	24.	5,806,060	Sept 8, 1998	Borgida et al			

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	77.	BIOREASON – Automated Reasoning Systems For Drug Discovery, www.bioreason.com, (various other articles from this site).
	78.	Blaschke et al., “Automatic Extraction Of Biological Information From Scientific Text: Protein-Protein Interactions”, Protein Design Group, ISBM -99, pages 60-67.
	79.	Bono et al., “Reconstruction Of Amino Acid Biosynthesis Pathways From The Complete Genome Sequence”, Institute For Chemical Research, Kyoto University, 1998 by Cold Spring Harbor Laboratory Press ISSN 1054-9803/98, pages 203-210.
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	25.	5,809,499	Sept 15, 1998	Wong et al.			
	26.	5,819,266	Oct 6, 1998	Agrawal et al.			
	27.	5,857,185	Jan 15, 1999	Yamaura			

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	82.	Chen et al., "An Algorithmic Approach To Concept Exploration In A Large Knowledge Network (Automatic Thesaurus Consultation): Symbolic Branch-and-Bound Search vs. Connectionist Hopfield Net Activation", Journal Of The American Society For Information Science, 46(5), 1995, pages 348-369.
	83.	Chen et al., "Automatic Construction Of Networks Of Concepts Characterizing Document Databases", IEEE Transactions On Systems, Man, And Cybernetics, Vol. 22, No. 5, September/October 1992, pages 885-902.
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	29.	5,867,118	Feb 2, 1999	McCoy et al.			
	30.	5,873,080	Feb 16, 1999	Coden et al.			

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	85.	Collins et al., "Driving Drug Discovery And Patient Therapy Via The Encapsulation And Fusion Of Knowledge", Momentum Healthcare Ltd, Pharmaceutical Sciences Research Institute, Drug Design And Discovery, 1999, Vol. 16, pages 181-194.
	86.	Collins, "Empiricism Strikes Back: Neural Networks In Biotechnology", Bio/Technology, Vol. 11, February 1993, pages 163-166.
	87.	Commercial Bioinformatics Software, www.uk.embnet.org/data/www/CCP11/commercial_software.txt.html , pages 1-12.
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	88.	Conway, et al., (1999), "Quantification of G-Protein Coupled Receptor Internalization Using G-Protein Coupled Receptor-Green Fluorescent Protein Conjugates with the ArrayScan TM High-Content Screening System", Vol:4(2), pp. 75-86.
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	90.	Craven et al., "Constructing Biological Knowledge Bases By Extracting Information From Text Sources", American Association For Artificial Intelligence, ISMB-99, pages 77-86.
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	95.	Gifford, "Blazing Pathways Through Genetic Mountains," Science, Vol. 293, September 2001, pages 2049-2051.
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	99.	Gordon et al., "Toward Discovery Support Systems: A Replication, Re-Examination, And Extension Of Swanson's Work On Literature-Based Discovery Of A Connection Between Raynaud's And Fish Oil, Journal Of The American Society For Information Science, 47(2), 1996, pages 116-128.
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	109.	Inpharmatica – World-Class Bioinformatics, www.inpharmatica.co.uk, (various other articles from this site).
	110.	Karp et al., "EcoCyc: Encyclopedia Of Escherichia Coli Genes And Metabolism", Nucleic Acids Research, 1998, Vol. 26, No. 1, pages 50-53.
	111.	Karp et al., "Representations of Metabolic Knowledge: Pathways", Artificial Intelligence Center, ISMB-94, pages 203-211.
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	113.	Kerlavage, A.R., et al., (1995) "Data Management and Analysis for High-Throughput DNA Sequencing Projects", IEEE Engineering in Medicine and Biology Magazine, US, IEEE Inc. New York, Vol:14(6) pp. 710-717.
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	118.	Manallack et al., "Neural Networks In Drug Discovery: Have They Lived Up To Their Promise?", Eur. J. Med. Chem., 34, 1999, pages 195-208.
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Applicant:

R. Terry Dunlay et al.

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